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wherein an inner diameter of said upper region is larger than an inner diameter of said middle region and wherein an inner diameter of said middle region is larger than or the same as an inner diameter of said lower region;

- (b) extracting genomic DNA from said concentrated microorganism to produce extracted nucleic acid; and
- (c) treating said nucleic acid with one or more restriction enzymes to produce fragments of nucleic acid; and
- (d) determining (1) the number of said fragments of nucleic acid, (2) the lengths of said fragments of nucleic acid, or (3) both the number of said fragments of nucleic acid and the lengths of said fragments of nucleic acid.

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92. (Twice amended) A method for determining a restriction enzyme map of a microorganism, wherein said method comprises the steps of:

- (a) concentrating said microorganism which comprises the steps of:
 - (i) adding a sample containing said microorganism to an ultracentrifuge tube and ultracentrifuging said sample in said ultracentrifuge tube to concentrate said microorganism, said ultracentrifuge tube comprising an upper region, a middle region and a lower region wherein an inner diameter of said upper region is larger than an

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inner diameter of said middle region and wherein an inner diameter of said middle region is larger than or the same as an inner diameter of said lower region;

- (b) extracting genomic DNA from said concentrated microorganism to produce extracted nucleic acid;
- (c) staining and extracting nucleic acid;
- (d) immobilizing said extracted nucleic acid on a solid support to produce immobilized nucleic acid;
- (e) treating said nucleic acid with one or more restriction enzymes to produce fragments of nucleic acid; and
- (f) determining (1) the number of said fragments of nucleic acid, (2) the lengths of said fragments of nucleic acid, or (3) both the number of said fragments of nucleic acid and the lengths of said fragments of nucleic acid.

Add new claims 93 through 95 as follows.

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93. (New) A method for determining a restriction enzyme map of a microorganism, wherein said method comprises the steps of:

- (a) concentrating said microorganism which comprises the steps of:
 - (i) adding a sample containing said microorganism to a centrifuge tube and
 - (ii) centrifuging said sample in said centrifuge tube to concentrate said microorganism, said centrifuge tube comprising an upper

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region, a middle region and a lower region wherein an inner diameter of said upper region is larger than an inner diameter of said middle region and wherein an inner diameter of said middle region is larger than or the same as an inner diameter of said lower region, wherein the inner walls of centrifuge tube are parallel to each other in each region;

- (b) extracting genomic DNA from said concentrated microorganism to produce extracted nucleic acid; and
- (c) treating said nucleic acid with one or more restriction enzymes to produce fragments of nucleic acid; and
- (d) determining (1) the number of said fragments of nucleic acid, (2) the lengths of said fragments of nucleic acid, or (3) both the number of said fragments of nucleic acid and the lengths of said fragments of nucleic acid.

94. (New) A method for determining the identity of a microorganism in a biological sample according to claim 93, wherein said method further comprises the steps of:

- (e) determining a restriction map; and
- (f) comparing said restriction map to restriction maps of known microorganisms, wherein a match of restriction maps of said microorganism in said biological sample with a restriction map of a

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known microorganism identifies the microorganism of said biological sample as being that of said known microorganism with an identical restriction map as that of the microorganism of said biological sample.

95. (New) A method for determining a restriction enzyme map of a microorganism, wherein said method comprises the steps of:

- (a) concentrating said microorganism which comprises the steps of:
 - (i) adding a sample containing said microorganism to an centrifuge tube and
 - (ii) centrifuging said sample in said centrifuge tube to concentrate said microorganism, said centrifuge tube comprising an upper region, a middle region and a lower region wherein an inner diameter of said upper region is larger than an inner diameter of said middle region and wherein an inner diameter of said middle region is larger than or the same as an inner diameter of said lower region, wherein the inner walls of centrifuge tube are parallel to each other in each region;
- (b) extracting genomic DNA from said concentrated microorganism to produce extracted nucleic acid;
- (c) staining and extracting nucleic acid;
- (d) immobilizing said extracted nucleic acid on a solid support to produce immobilized nucleic acid;
- (e) treating said nucleic acid with one or more restriction enzymes to

produce fragments of nucleic acid; and

- (f) determining (1) the number of said fragments of nucleic acid, (2) the lengths of said fragments of nucleic acid, or (3) both the number of said fragments of nucleic acid and the lengths of said fragments of nucleic acid.

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